

10/ 667,111

Connecting via Winsock to STN

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TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	JAN 02	STN pricing information for 2008 now available
NEWS	3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	5	JAN 28	MARPAT searching enhanced
NEWS	6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	9	FEB 08	STN Express, Version 8.3, now available
NEWS	10	FEB 20	PCI now available as a replacement to DPCI
NEWS	11	FEB 25	IFIREF reloaded with enhancements
NEWS	12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS	14	MAR 31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats
NEWS	15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS	16	MAR 31	CA/CAPplus and CASREACT patent number format for U.S. applications updated
NEWS	17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS	18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	19	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS	20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3, AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008			
NEWS HOURS	STN Operating Hours Plus Help Desk Availability		
NEWS LOGIN	Welcome Banner and News Items		
NEWS IPC8	For general information regarding STN implementation of IPC 8		

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:41:38 ON 23 APR 2008

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 10:42:15 ON 23 APR 2008

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STRUCTURE FILE UPDATES: 22 APR 2008 HIGHEST RN 1016649-50-5

DICTIONARY FILE UPDATES: 22 APR 2008 HIGHEST RN 1016649-50-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

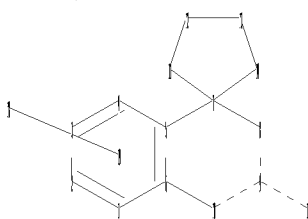
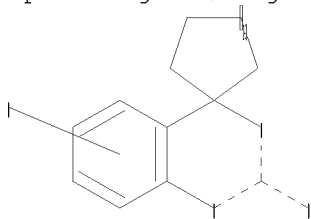
Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10667111.str



chain nodes :

15 18

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

9-15

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 7-11 7-14 8-9 9-10 11-12 12-13
13-14

exact/norm bonds :

8-9 9-10 9-15

exact bonds :

5-7 6-10 7-8 7-11 7-14 11-12 12-13 13-14

normalized bonds :

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1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 18:CLASS 19:Atom

L1 STRUCTURE UPLOADED

=> L1

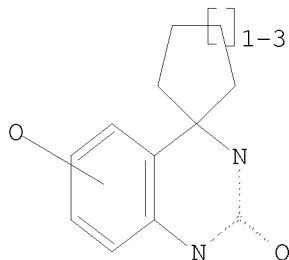
L1 IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 10:42:44 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 24 TO ITERATE

100.0% PROCESSED 24 ITERATIONS

5 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 187 TO 773

PROJECTED ANSWERS: 5 TO 234

L2 5 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 10:42:49 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 393 TO ITERATE

100.0% PROCESSED 393 ITERATIONS

87 ANSWERS

SEARCH TIME: 00.00.01

L3 87 SEA SSS FUL L1

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=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'CAPLUS' ENTERED AT 10:42:56 ON 23 APR 2008

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FILE COVERS 1907 - 23 Apr 2008 VOL 148 ISS 17

FILE LAST UPDATED: 22 Apr 2008 (20080422/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 13

L4 8 L3

=> d 14 1- ibib abs hitstr

YOU HAVE REQUESTED DATA FROM 8 ANSWERS - CONTINUE? Y/(N):y

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:619774 CAPLUS

DOCUMENT NUMBER: 147:52915

TITLE: Preparation of spiro-cyclic quinazoline derivatives as phosphodiesterase inhibitors and antiviral agents

INVENTOR(S): Rawson, David James; Swain, Nigel Alan

PATENT ASSIGNEE(S): Pfizer Limited, UK

SOURCE: PCT Int. Appl., 110pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007063391	A2	20070607	WO 2006-IB3388	20061123
WO 2007063391	A3	20070913		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,			

TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

NL 2000336 A1 20070605 NL 2006-2000336 20061127

NL 2000336 C2 20070807

US 20070129388 A1 20070607 US 2006-565953 20061201

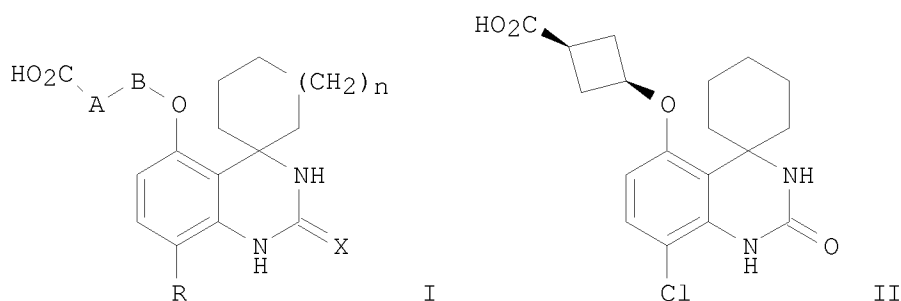
PRIORITY APPLN. INFO.:

US 2005-741854P P 20051202

US 2006-791186P P 20060410

OTHER SOURCE(S): MARPAT 147:52915

GI



AB Spiro-cyclic quinazoline derivs. I, wherein: n is 0-2; X is O, S, N-CN; R is F, Cl, CN; A is a C3-6 cyclo-alkylene group optionally substituted with a C1-4 alkyl group; and B is a single bond or a C1-2 alkylene group; or a pharmaceutically acceptable salt, solvate, polymorph or prodrug thereof for the treatment of diseases or conditions for which therapy by a phosphodiesterase 7 (PDE7) inhibitor is relevant, wherein the disease or condition is selected from pain, T-cell-related diseases, autoimmune diseases, multiple sclerosis, osteoporosis, chronic obstructive pulmonary disease, asthma, cancer, acquired immune deficiency syndrome (AIDS), allergy, or inflammatory bowel disease. The compds. are PDE7 inhibitors and have a number of therapeutic applications, particularly in the treatment of pain, especially neuropathic pain. Thus, title quinazoline II was prepared from 8'-chloro-5'-hydroxy-1'H-spiro[cyclohexane-1,4'-quinazolin]-2'(3'H)-one via oxidation of 8'-Chloro-5'-{[cis-3-(hydroxymethyl)cyclobutyl]oxy}-1'H-spiro[cyclohexane-1,4'-quinazolin]-2'(3'H)-one with periodic acid.

IT 908570-12-7P 908570-13-8P 939768-47-5P

939768-48-6P 939768-49-7P 939768-50-0P

939768-51-1P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

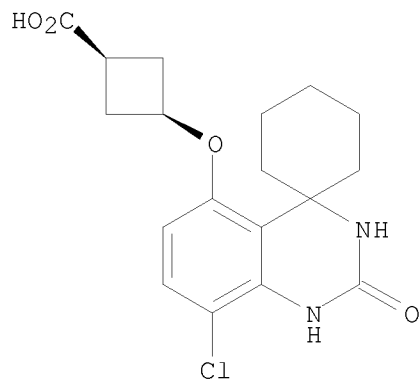
(preparation of spiro-cyclic quinazoline derivs. as phosphodiesterase inhibitors and antiviral agents)

RN 908570-12-7 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]-, cis- (CA INDEX NAME)

Relative stereochemistry.

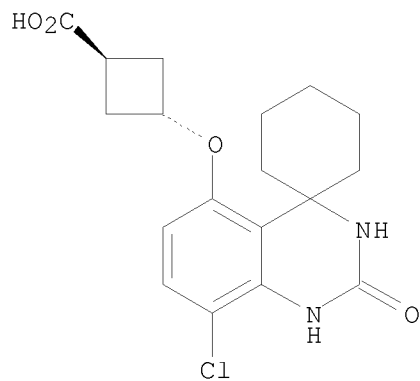
10/ 667,111



RN 908570-13-8 CAPLUS

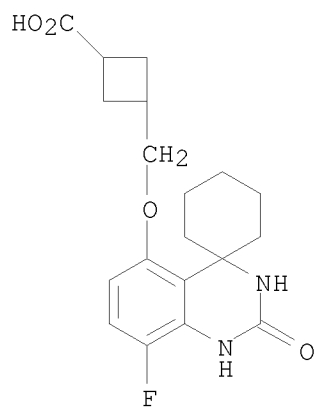
CN Cyclobutanecarboxylic acid, 3-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]-, trans- (CA INDEX NAME)

Relative stereochemistry.



RN 939768-47-5 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[[[8'-fluoro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl]oxy]methyl]- (CA INDEX NAME)

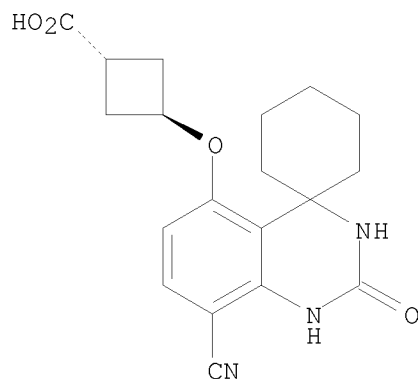


10/ 667,111

RN 939768-48-6 CAPLUS

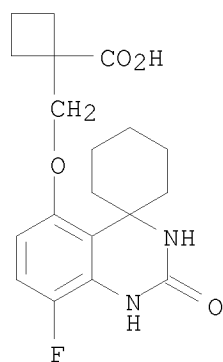
CN Cyclobutanecarboxylic acid, 3-[(8'-cyano-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]-, trans- (CA INDEX NAME)

Relative stereochemistry.



RN 939768-49-7 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[[8'-fluoro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazoline]-5'-yl]oxy]methyl]- (CA INDEX NAME)

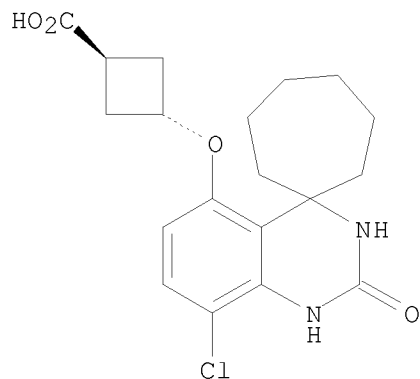


RN 939768-50-0 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[[[8'-chloro-2',3'-dihydro-2'-oxospiro[cycloheptane-1,4'(1'H)-quinazoline]-5'-yl]oxy]-, trans- (CA INDEX NAME)

Relative stereochemistry.

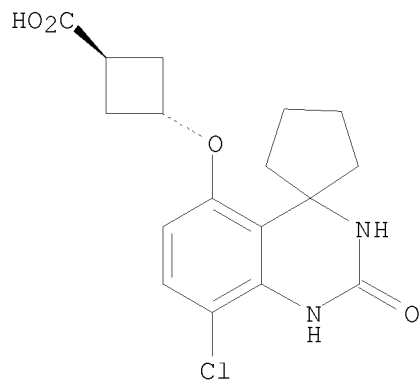
10/ 667,111



RN 939768-51-1 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[[8'-chloro-2',3'-dihydro-2'-oxospiro[cyclopentane-1,4'(1'H)-quinazolin]-5'-yl]oxy]-, trans- (CA INDEX NAME)

Relative stereochemistry.



IT 939768-70-4 939768-71-5 939768-72-6
939768-73-7

RL: PRP (Properties)

(preparation of spiro-cyclic quinazoline derivs. as phosphodiesterase inhibitors and antiviral agents)

RN 939768-70-4 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[[8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazoline]-5'-yl]oxy]-, trans-, compd. with N,N-dimethylacetamide (1:2) (CA INDEX NAME)

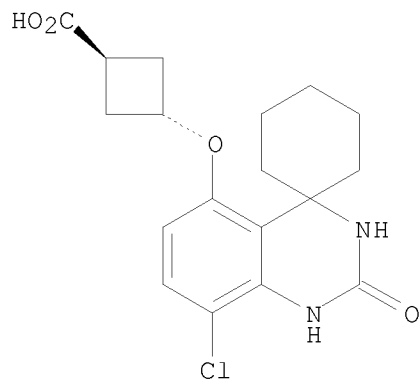
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CRN 908570-13-8

CMF C18 H21 Cl N2 O4

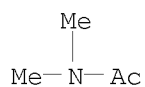
Relative stereochemistry.

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CM 2

CRN 127-19-5
CMF C4 H9 N O

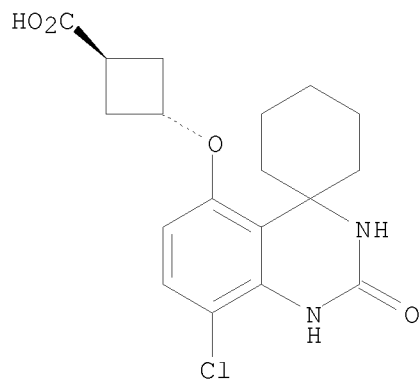


RN 939768-71-5 CAPLUS
CN Cyclobutanecarboxylic acid, 3-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]-, trans-, compd. with pyridine (1:1) (CA INDEX NAME)

CM 1

CRN 908570-13-8
CMF C18 H21 Cl N2 O4

Relative stereochemistry.



CM 2

CRN 110-86-1
CMF C5 H5 N

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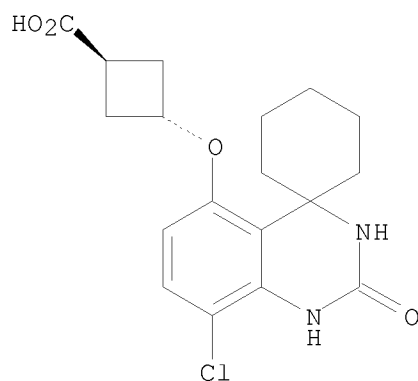


RN 939768-72-6 CAPLUS
CN Cyclobutanecarboxylic acid, 3-[[8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazoline]-5'-yl]oxy]-, trans-, compd. with tetrahydrofuran (1:1) (CA INDEX NAME)

CM 1

CRN 908570-13-8
CMF C18 H21 Cl N2 O4

Relative stereochemistry.



CM 2

CRN 109-99-9
CMF C4 H8 O



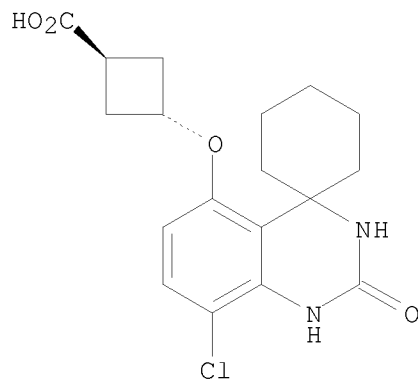
RN 939768-73-7 CAPLUS
CN Cyclobutanecarboxylic acid, 3-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]-, trans-, compd. with 1,1'-sulfinylbis[methane] (1:?) (CA INDEX NAME)

CM 1

CRN 908570-13-8
CMF C18 H21 Cl N2 O4

Relative stereochemistry.

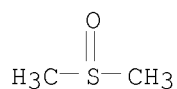
10/ 667,111



CM 2

CRN 67-68-5

CMF C2 H6 O S



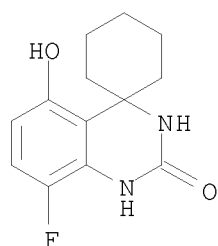
IT 939768-67-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of spiro-cyclic quinazoline derivs. as phosphodiesterase inhibitors and antiviral agents)

RN 939768-67-9 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-fluoro-5'-hydroxy-
(CA INDEX NAME)



IT 460346-02-5P 460346-10-5P 674336-39-1P

908570-15-0P 908570-16-1P 908570-18-3P

908570-19-4P 939768-52-2P 939768-53-3P

939768-54-4P 939768-55-5P 939768-56-6P

939768-57-7P 939768-61-3P 939768-62-4P

939768-63-5P 939768-66-8P 939768-69-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

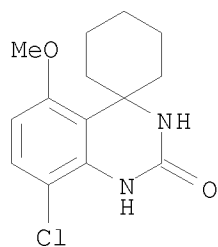
(preparation of spiro-cyclic quinazoline derivs. as phosphodiesterase inhibitors and antiviral agents)

RN 460346-02-5 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-methoxy-

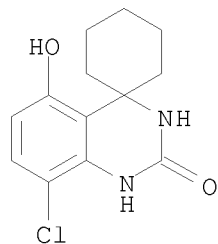
10/ 667,111

(CA INDEX NAME)



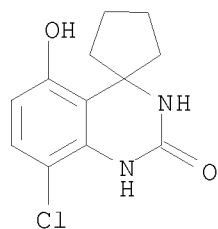
RN 460346-10-5 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-hydroxy-
(CA INDEX NAME)



RN 674336-39-1 CAPLUS

CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-hydroxy-
(CA INDEX NAME)

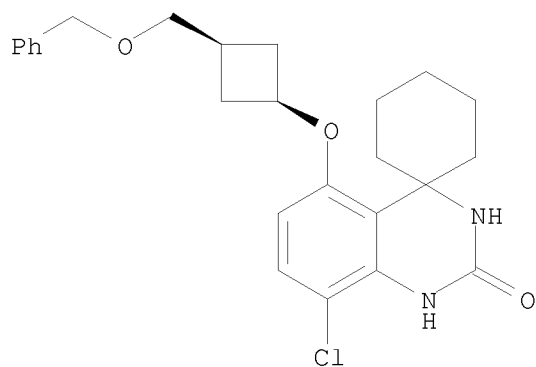


RN 908570-15-0 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[cis-3-
[(phenylmethoxy)methyl]cyclobutyl]oxy]- (CA INDEX NAME)

Relative stereochemistry.

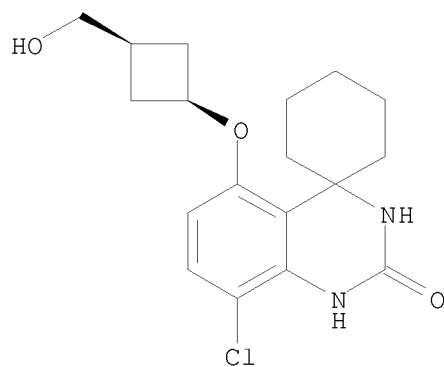
10/ 667,111



RN 908570-16-1 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[cis-3-(hydroxymethyl)cyclobutyl]oxy]- (CA INDEX NAME)

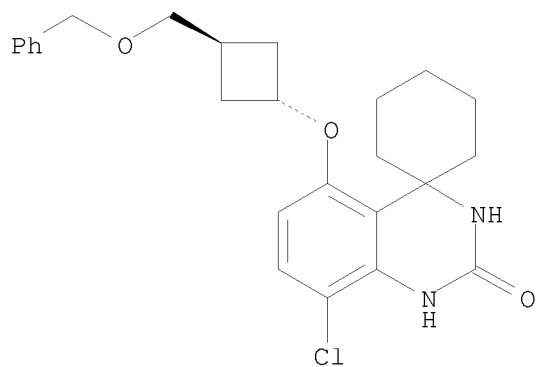
Relative stereochemistry.



RN 908570-18-3 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[trans-3-[(phenylmethoxy)methyl]cyclobutyl]oxy]- (CA INDEX NAME)

Relative stereochemistry.



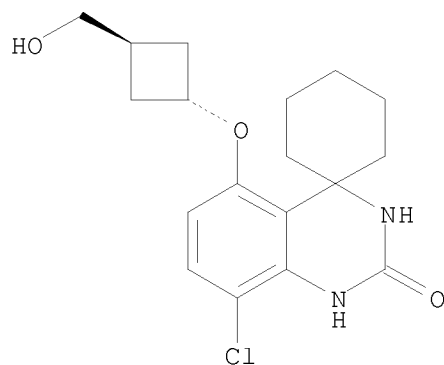
RN 908570-19-4 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[trans-

10/ 667,111

3-(hydroxymethyl)cyclobutyl]oxy]- (CA INDEX NAME)

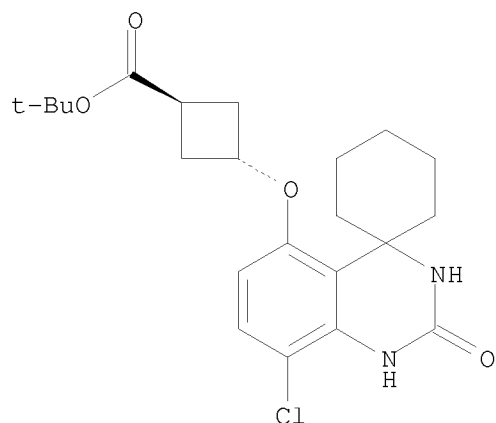
Relative stereochemistry.



RN 939768-52-2 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[[8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazoline]-5'-yl]oxy]-, 1,1-dimethylethyl ester, trans- (CA INDEX NAME)

Relative stereochemistry.



RN 939768-53-3 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[[8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazoline]-5'-yl]oxy]-, trans-, acetate (1:1) (CA INDEX NAME)

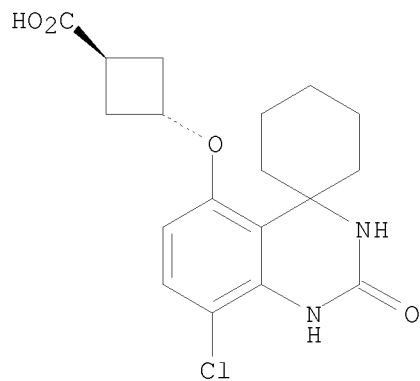
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CRN 908570-13-8

CMF C18 H21 Cl N2 O4

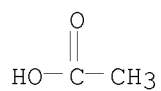
Relative stereochemistry.

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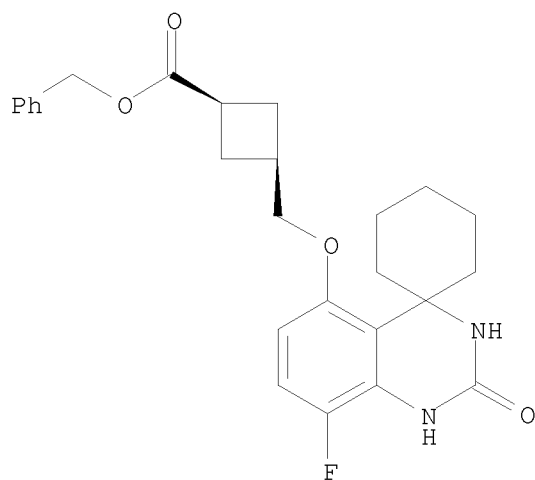
CM 2

CRN 64-19-7
CMF C2 H4 O2



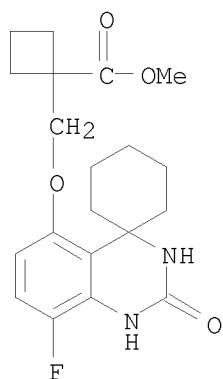
RN 939768-54-4 CAPLUS
CN Cyclobutanecarboxylic acid, 3-[[[8'-fluoro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazoline]-5'-yl]oxy]methyl]-, phenylmethyl ester, cis- (CA INDEX NAME)

Relative stereochemistry.



RN 939768-55-5 CAPLUS
CN Cyclobutanecarboxylic acid, 1-[[[8'-fluoro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazoline]-5'-yl]oxy]methyl]-, methyl ester (CA INDEX NAME)

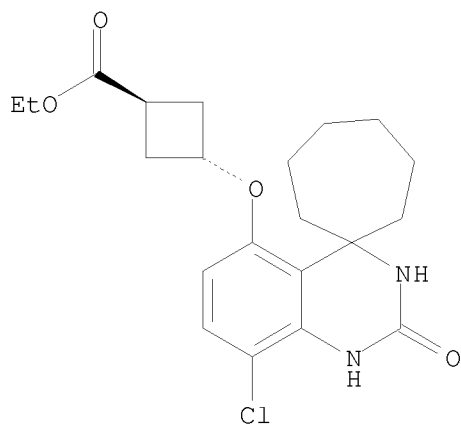
10/ 667,111



RN 939768-56-6 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[[8'-chloro-2',3'-dihydro-2'-oxospiro[cycloheptane-1,4'(1'H)-quinazoline]-5'-yl]oxy]-, ethyl ester, trans- (CA INDEX NAME)

Relative stereochemistry.

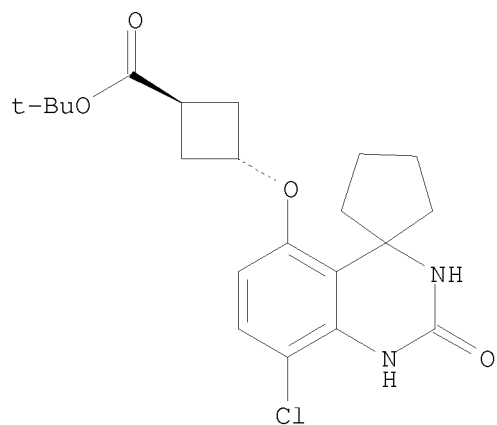


RN 939768-57-7 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[[8'-chloro-2',3'-dihydro-2'-oxospiro[cyclopentane-1,4'(1'H)-quinazolin]-5'-yl]oxy]-, 1,1-dimethylethyl ester, trans- (CA INDEX NAME)

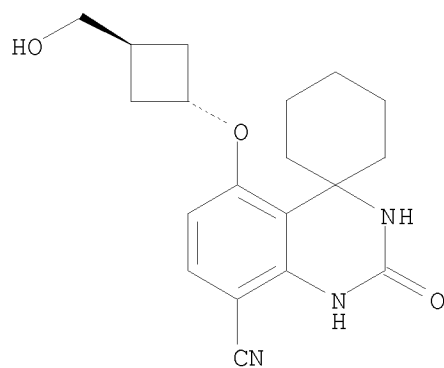
Relative stereochemistry.

10/ 667,111

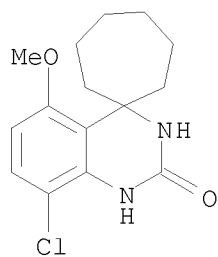


RN 939768-61-3 CAPLUS
CN Spiro[cyclohexane-1,4'-(1'H)-quinazoline]-8'-carbonitrile,
2',3'-dihydro-5'-[[trans-3-(hydroxymethyl)cyclobutyl]oxy]-2'-oxo- (CA
INDEX NAME)

Relative stereochemistry.

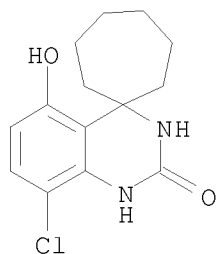


RN 939768-62-4 CAPLUS
CN Spiro[cycloheptane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-methoxy-
(CA INDEX NAME)



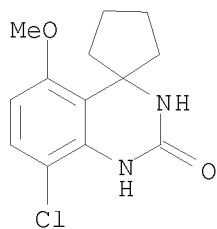
RN 939768-63-5 CAPLUS
CN Spiro[cycloheptane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-hydroxy-
(CA INDEX NAME)

10/ 667,111



RN 939768-66-8 CAPLUS

CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-methoxy-
(CA INDEX NAME)



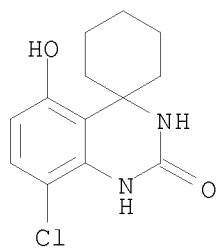
RN 939768-69-1 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-hydroxy-
, acetate (1:1) (CA INDEX NAME)

CM 1

CRN 460346-10-5

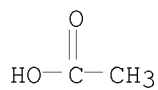
CMF C13 H15 Cl N2 O2



CM 2

CRN 64-19-7

CMF C2 H4 O2



L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:918813 CAPLUS
 DOCUMENT NUMBER: 145:315261
 TITLE: Use of combinations of PDE7 inhibitors and
 alpha-2-delta ligands for the treatment of neuropathic
 pain
 INVENTOR(S): Cox, Peter; Kinloch, Ross Anderson; Maw, Graham Nigel
 PATENT ASSIGNEE(S): Pfizer Limited, UK
 SOURCE: PCT Int. Appl., 101pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2006092692	A1	20060908	WO 2006-IB385	20060216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
JP 2006241158	A	20060914	JP 2006-52759	20060228
JP 2006241159	A	20060914	JP 2006-53415	20060228
PRIORITY APPLN. INFO.:			GB 2005-4209	A 20050301
			US 2005-675761P	P 20050427
			US 2005-741854P	P 20051202

OTHER SOURCE(S): CASREACT 145:315261

AB The invention relates to a combination of a phosphodiesterase 7 (PDE7)
 inhibitor and an alpha-2-delta ligand or their pharmaceutically acceptable
 salts for use in the treatment of pain, particularly inflammatory,
 neuropathic, visceral and nociceptive pain. An example of a PDE7
 inhibitor is cis-3-[(8'-chloro-2'-oxo-2',3'-dihydro-1'H-spiro[cyclohexane-
 1,4'-quinazolin]-5'-yl)oxy]cyclobutanecarboxylic acid and an example of an
 alpha-2-delta ligand is (2S)-2-amino-4-ethyl-2-methylhexanoic acid,
 syntheses of which are described.

IT 460346-24-1P 908570-12-7P 908570-13-8P

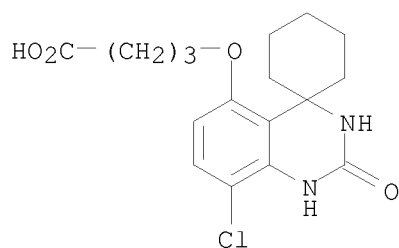
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(combinations of PDE7 inhibitors and alpha-2-delta ligands for
 treatment of neuropathic pain)

RN 460346-24-1 CAPLUS

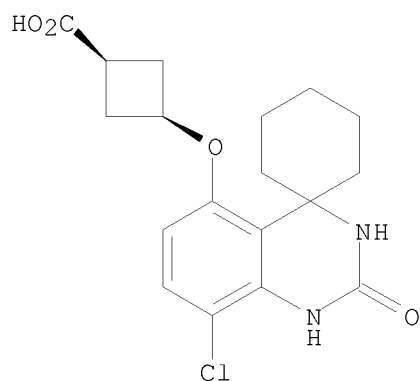
CN Butanoic acid, 4-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-
 1,4'(1'H)-quinazolin]-5'-yl)oxy]- (9CI) (CA INDEX NAME)

10/ 667,111



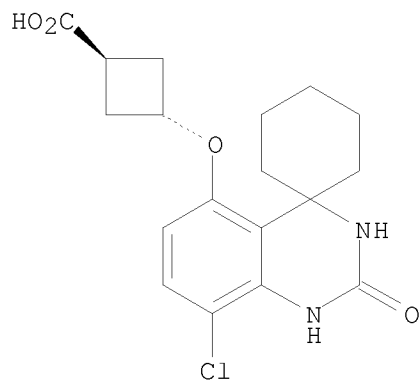
RN 908570-12-7 CAPLUS
CN Cyclobutanecarboxylic acid, 3-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]-, cis- (CA INDEX NAME)

Relative stereochemistry.



RN 908570-13-8 CAPLUS
CN Cyclobutanecarboxylic acid, 3-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]-, trans- (CA INDEX NAME)

Relative stereochemistry.

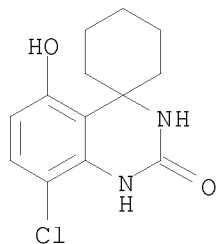


IT 460346-10-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(combinations of PDE7 inhibitors and alpha-2-delta ligands for treatment of neuropathic pain)

10/ 667,111

RN 460346-10-5 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-hydroxy-
(CA INDEX NAME)



IT 908570-15-0P 908570-16-1P 908570-18-3P

908570-19-4P

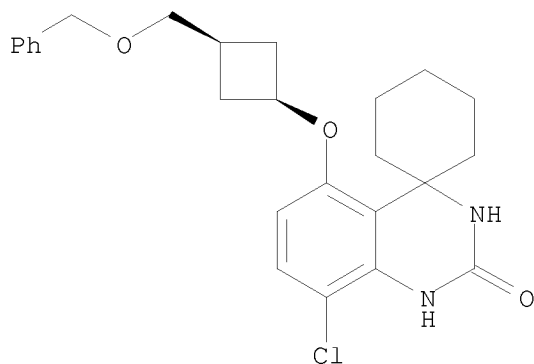
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(combinations of PDE7 inhibitors and alpha-2-delta ligands for
treatment of neuropathic pain)

RN 908570-15-0 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[cis-3-
[(phenylmethoxy)methyl]cyclobutyl]oxy]- (CA INDEX NAME)

Relative stereochemistry.

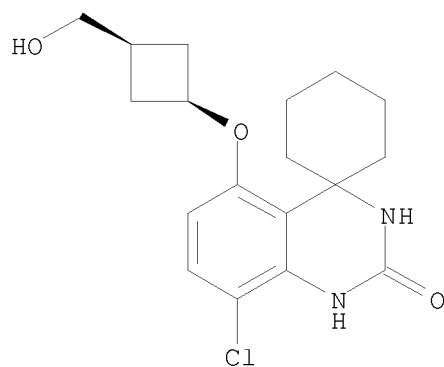


RN 908570-16-1 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[cis-3-
(hydroxymethyl)cyclobutyl]oxy]- (CA INDEX NAME)

Relative stereochemistry.

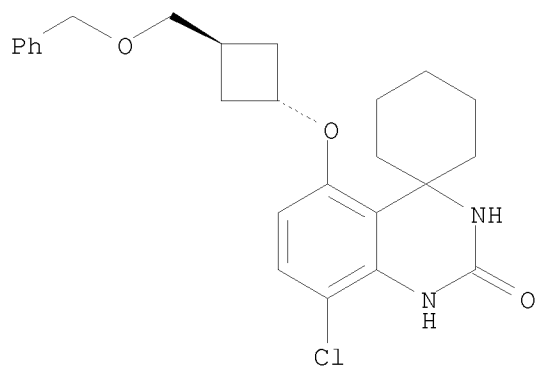
10/ 667,111



RN 908570-18-3 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[trans-3-[(phenylmethoxy)methyl]cyclobutyl]oxy]- (CA INDEX NAME)

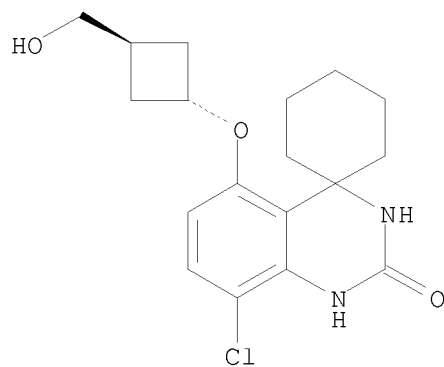
Relative stereochemistry.



RN 908570-19-4 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[trans-3-(hydroxymethyl)cyclobutyl]oxy]- (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT:

14

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:918625 CAPLUS

DOCUMENT NUMBER: 145:315008

TITLE: Preparation of spiro[cyclohexane-1,4'-quinazoline]
derivatives for use as PDE7 inhibitors for the
treatment of neuropathic pain

INVENTOR(S): Cox, Peter; Kinloch, Ross Anderson; Maw, Graham Nigel

PATENT ASSIGNEE(S): Pfizer Limited, UK

SOURCE: PCT Int. Appl., 108pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

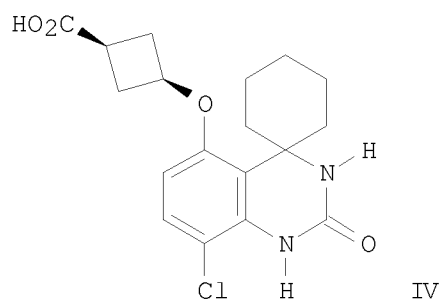
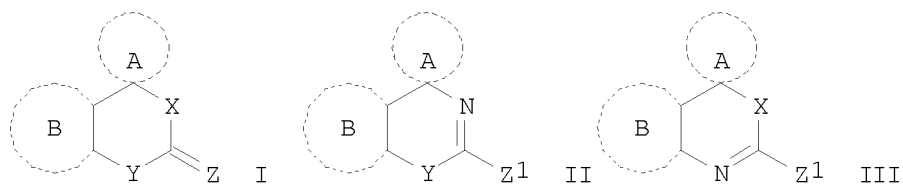
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006092691	A1	20060908	WO 2006-IB369	20060216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2006219643	A1	20060908	AU 2006-219643	20060216
CA 2599662	A1	20060908	CA 2006-2599662	20060216
EP 1855686	A1	20071121	EP 2006-710434	20060216
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
JP 2006241159	A	20060914	JP 2006-53415	20060228
KR 2007107099	A	20071106	KR 2007-720010	20070831
MX 200710721	A	20071113	MX 2007-10721	20070831
IN 2007DN07221	A	20071012	IN 2007-DN7221	20070919
CN 101146539	A	20080319	CN 2006-80009067	20070920
PRIORITY APPLN. INFO.:			GB 2005-4209	A 20050301
			US 2005-675761P	P 20050427
			WO 2006-IB369	W 20060216

OTHER SOURCE(S): MARPAT 145:315008

GI



AB Comps. I-III [Ring B = (un)substituted six-membered aryl or heteroaryl ring; Ring A = (un)substituted spirocycle or spiroheterocycle; X = O or NH, NNH₂, etc.; Y = O, S, NH, etc.; Z = CHNO₂, O, S, etc.; Z₁ = H, Me, NH₂, etc.] are disclosed as phosphodiesterase 7 (PDE7) inhibitors for use in the manufacture of a medicament for the treatment of neuropathic pain and to a method of treating neuropathic pain using an inhibitor of PDE7. Methods for preparing title compds. are given. Thus, e.g., IV was prepared by substitution of trans-3-[(benzyloxy)methyl]cyclobutyl p-toluenesulfonate (preparation given) with 8'-chloro-5'-hydroxy-1'H-spiro[cyclohexane-1,4'-quinazolin]-2'(3'H)-one followed by deprotection and oxidation. In PDE7A inhibition assays, IV demonstrated a K_i value of 1.9 (nM).

IT 908570-12-7P 908570-13-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

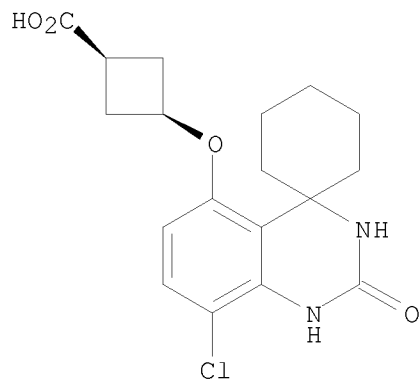
(preparation of spiro[cyclohexane-1,4'-quinazoline] derivs. for use as PDE7 inhibitors for the treatment of neuropathic pain)

RN 908570-12-7 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]-, cis- (CA INDEX NAME)

Relative stereochemistry.

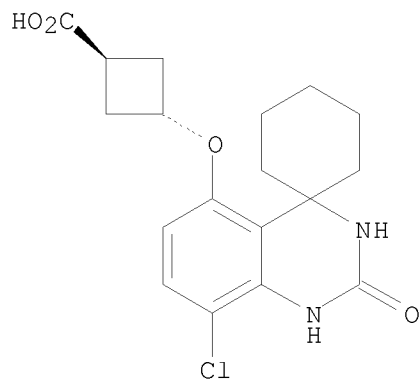
10/ 667,111



RN 908570-13-8 CAPLUS

CN Cyclobutanecarboxylic acid, 3-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]-, trans- (CA INDEX NAME)

Relative stereochemistry.



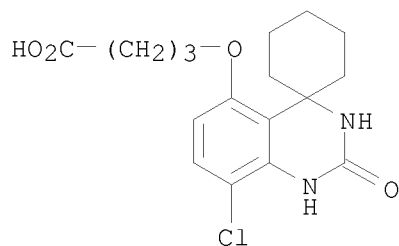
IT 460346-24-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of spiro[cyclohexane-1,4'-quinazoline] derivs. for use as PDE7 inhibitors for the treatment of neuropathic pain)

RN 460346-24-1 CAPLUS

CN Butanoic acid, 4-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]- (9CI) (CA INDEX NAME)



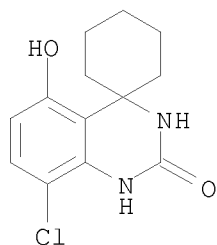
IT 460346-10-5

10/ 667,111

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of spiro[cyclohexane-1,4'-quinazoline] derivs. for use as PDE7
inhibitors for the treatment of neuropathic pain)

RN 460346-10-5 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-hydroxy-
(CA INDEX NAME)



IT 908570-15-0P 908570-16-1P 908570-18-3P
908570-19-4P

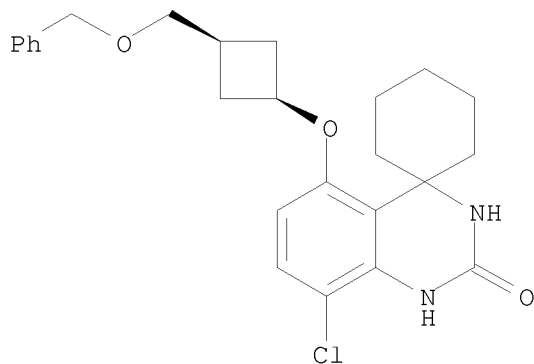
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(preparation of spiro[cyclohexane-1,4'-quinazoline] derivs. for use as PDE7
inhibitors for the treatment of neuropathic pain)

RN 908570-15-0 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[cis-3-
[(phenylmethoxy)methyl]cyclobutyl]oxy]- (CA INDEX NAME)

Relative stereochemistry.

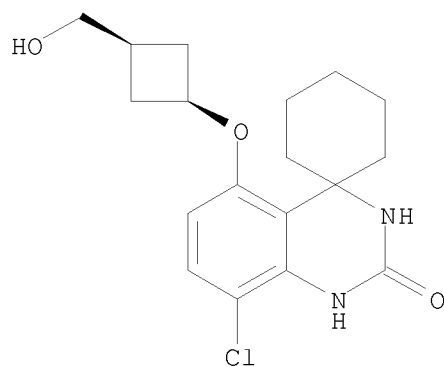


RN 908570-16-1 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[cis-3-
(hydroxymethyl)cyclobutyl]oxy]- (CA INDEX NAME)

Relative stereochemistry.

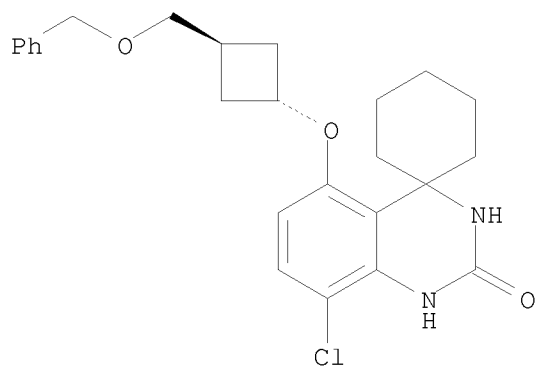
10/ 667,111



RN 908570-18-3 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[trans-3-[(phenylmethoxy)methyl]cyclobutyl]oxy]- (CA INDEX NAME)

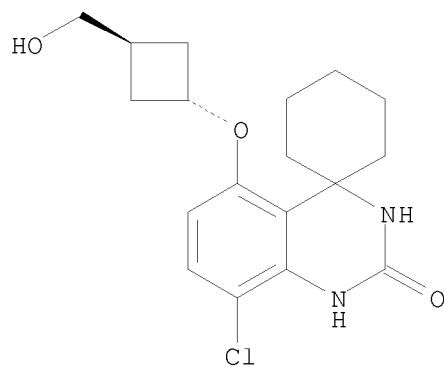
Relative stereochemistry.



RN 908570-19-4 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[[trans-3-(hydroxymethyl)cyclobutyl]oxy]- (CA INDEX NAME)

Relative stereochemistry.

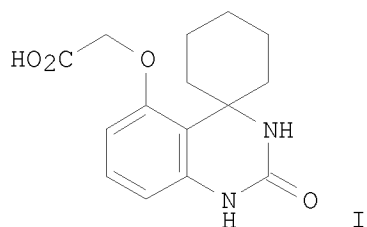


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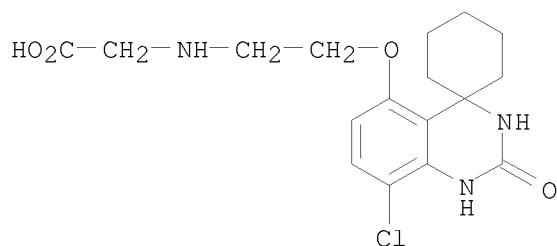
6

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:689239 CAPLUS
 DOCUMENT NUMBER: 141:332154
 TITLE: Spiroquinazolinones as novel, potent, and selective
 PDE7 inhibitors. Part 2: optimization of
 5,8-disubstituted derivatives
 AUTHOR(S): Bernardelli, Patrick; Lorthiois, Edwige; Vergne,
 Fabrice; Oliveira, Chrystelle; Mafroud, Abdel-Kader;
 Proust, Emmanuelle; Pham, Nga; Ducrot, Pierre; Moreau,
 Francois; Idrissi, Moulay; Tertre, Anita; Bertin,
 Bernadette; Coupe, Magali; Chevalier, Eric; Descours,
 Arnaud; Berlioz-Seux, Francoise; Berna, Patrick; Li,
 Mei
 CORPORATE SOURCE: Pfizer Global Research and Development, Fresnes,
 94265, Fr.
 SOURCE: Bioorganic & Medicinal Chemistry Letters (2004),
 14(18), 4627-4631
 CODEN: BMCLE8; ISSN: 0960-894X
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 141:332154
 GI

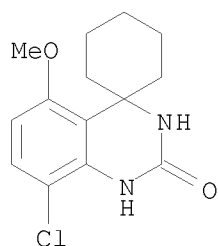


AB The optimization of 5,8-disubstituted spirocyclohexane-quinazolinones into
 potent, selective, soluble PDE7 inhibitors with acceptable in vivo
 pharmacokinetic parameters is presented. It was also reported that
 5'-carboxymethoxy-8'-chlorospiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one
 (I) and 8'-chloro-5'-(2-hydroxyethoxy)spiro[cyclohexane-1,4'-quinazolin]-
 2'(1'H)-one were selected for studies in rat models.
 IT 460346-61-6P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation)
 (preparation of N-[2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-
 1,4'(1'H)-quinazolin]-5'-yl)oxy]ethyl]glycine and study of its activity
 as phosphodiesterase (PDE7) inhibitor)
 RN 460346-61-6 CAPLUS
 CN Glycine, N-[2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-
 quinazolin]-5'-yl)oxy]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

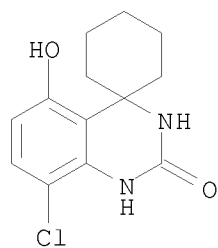


● HCl

IT 460346-02-5P, 8'-Chloro-5'-methoxyspiro[cyclohexane-1,4'-quinazolin]-2'-(1'H)-one 460346-10-5P, 8'-Chloro-5'-hydroxyspiro[cyclohexane-1,4'-quinazolin]-2'-(1'H)-one 460346-28-5P, 8'-Chloro-5'-(2-hydroxyethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'-(1'H)-one 460346-31-0P
 RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of chlorospiro[cyclohexane-1,4'-quinazolin]-2'-(1'H)-one derivs. and study of their activity as phosphodiesterase (PDE-7) inhibitors)
 RN 460346-02-5 CAPLUS
 CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-methoxy- (CA INDEX NAME)



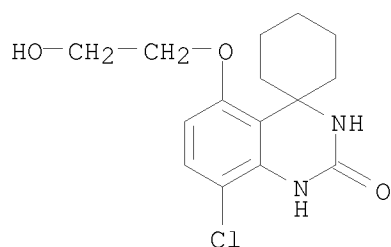
RN 460346-10-5 CAPLUS
 CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-hydroxy- (CA INDEX NAME)



RN 460346-28-5 CAPLUS
 CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-(2-

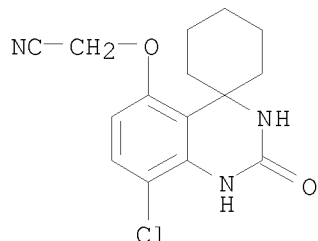
10/ 667,111

hydroxyethoxy)- (CA INDEX NAME)



RN 460346-31-0 CAPLUS

CN Acetonitrile, [(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]- (9CI) (CA INDEX NAME)

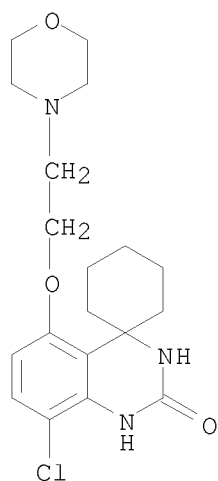


IT 460346-14-9P, 8'-Chloro-5'-[2-(4-morpholino)ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-23-0P, 5'-Carboxymethoxy-8'-chlorospiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-32-1P, 8'-Chloro-5'-(1H-tetrazol-5-ylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-33-2P, 8'-Chloro-5'-(5-hydroxy-[1,2,4]oxadiazol-3-ylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of chlorospiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one derivs. and study of their activity as phosphodiesterase (PDE-7) inhibitors)

RN 460346-14-9 CAPLUS

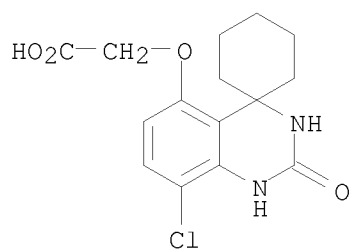
CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-[2-(4-morpholinyl)ethoxy]- (CA INDEX NAME)

10/ 667,111



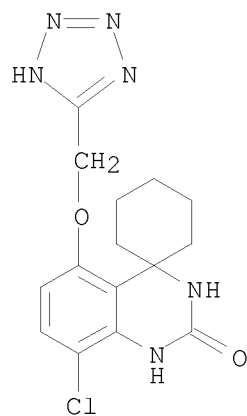
RN 460346-23-0 CAPLUS

CN Acetic acid, [(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]- (9CI) (CA INDEX NAME)



RN 460346-32-1 CAPLUS

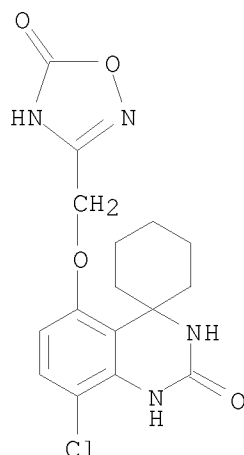
CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-(1H-tetrazol-5-ylmethoxy)- (9CI) (CA INDEX NAME)



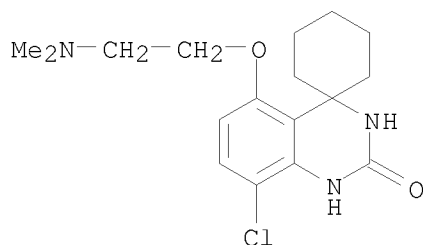
RN 460346-33-2 CAPLUS

CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-[(2,5-

dihydro-5-oxo-1,2,4-oxadiazol-3-yl)methoxy]- (CA INDEX NAME)



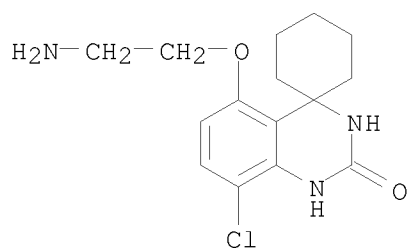
- IT 460346-15-0P, 8'-Chloro-5'-[2-(dimethylamino)ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-16-1P, 8'-Chloro-5'-(2-aminoethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-18-3P, 8'-Chloro-5'-[2-(methylamino)ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-19-4P, 8'-Chloro-5'-[2-(2-aminoethoxy)ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-21-8P, 8'-Chloro-5'-[3-(dimethylamino)propoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-26-3P, 8'-Chloro-5'-[3-sulfopropoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-29-6P, 8'-Chloro-5'-(5-ethoxycarbonylfuran-2-ylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-30-9P, 8'-Chloro-5'-(5-carboxyfuran-2-ylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-57-0P, 8'-Chloro-5'-[3-(dimethylamino)-2-hydroxypropoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-59-2P, 8'-Chloro-5'-(3-methylamino-2-hydroxypropoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of chlorospiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one derivs. and study of their activity as phosphodiesterase (PDE7) inhibitors)
- RN 460346-15-0 CAPLUS
- CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-[2-(dimethylamino)ethoxy]- (CA INDEX NAME)



- RN 460346-16-1 CAPLUS
- CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 5'-(2-aminoethoxy)-8'-

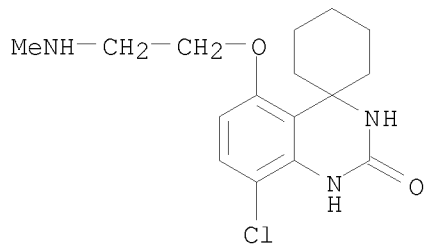
10/ 667,111

chloro- (CA INDEX NAME)



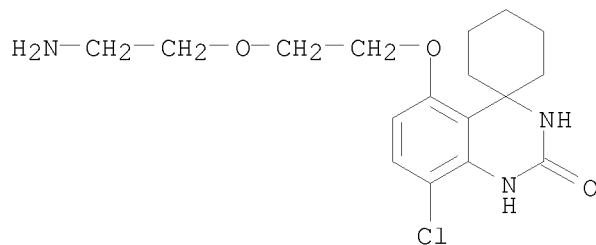
RN 460346-18-3 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[2-(methylamino)ethoxy]- (CA INDEX NAME)



RN 460346-19-4 CAPLUS

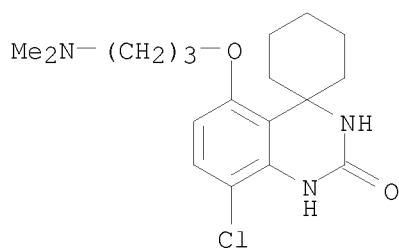
CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 5'-[2-(2-aminoethoxy)ethoxy]-8'-chloro- (CA INDEX NAME)



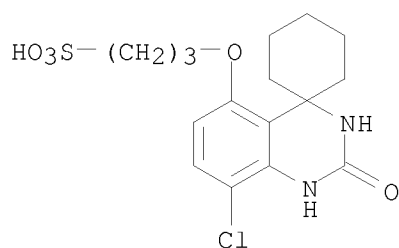
RN 460346-21-8 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[3-(dimethylamino)propoxy]- (CA INDEX NAME)

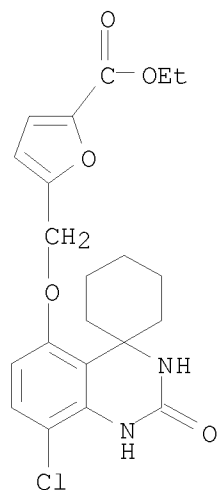
10/ 667,111



RN 460346-26-3 CAPLUS
CN 1-Propanesulfonic acid, 3-[[8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl]oxy]- (9CI) (CA INDEX NAME)

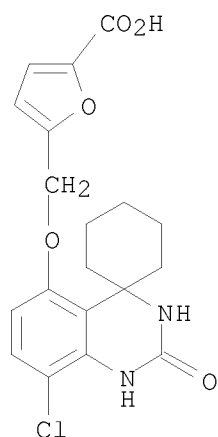


RN 460346-29-6 CAPLUS
CN 2-Furancarboxylic acid, 5-[[[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



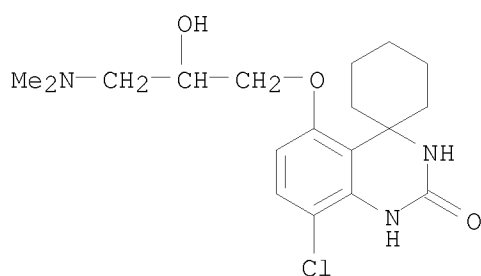
RN 460346-30-9 CAPLUS
CN 2-Furancarboxylic acid, 5-[[[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]methyl]- (9CI) (CA INDEX NAME)

10/ 667,111



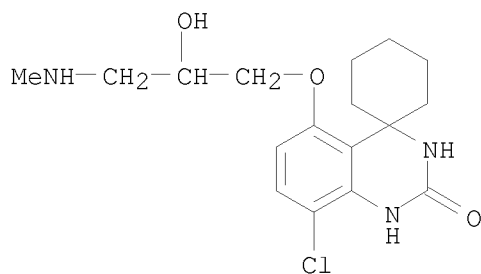
RN 460346-57-0 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[3-(dimethylamino)-2-hydroxypropoxy]- (CA INDEX NAME)



RN 460346-59-2 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[2-hydroxy-3-(methylamino)propoxy]- (CA INDEX NAME)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:689238 CAPLUS

DOCUMENT NUMBER: 141:253666

TITLE: Spiroquinazolinones as novel, potent, and selective PDE7 inhibitors. Part 1

AUTHOR(S): Lorthiois, Edwige; Bernardelli, Patrick; Vergne,

Fabrice; Oliveira, Chrystelle; Mafroud, Abdel-Kader;
 Proust, Emmanuelle; Heuze, Lamia; Moreau, Francois;
 Idrissi, Moulay; Tertre, Anita; Bertin, Bernadette;
 Coupe, Magali; Wrigglesworth, Roger; Descours, Arnaud;
 Soulard, Patricia; Berna, Patrick

CORPORATE SOURCE: Pfizer Global Research and Development, Fresnes,
 94265, Fr.

SOURCE: Bioorganic & Medicinal Chemistry Letters (2004),
 14(18), 4623-4626

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:253666

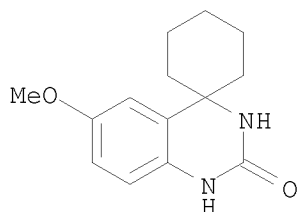
AB The synthesis and SAR studies of spiroquinazolinones as novel PDE7
 inhibitors are discussed. The best compds. from the series displayed
 nanomolar inhibitory affinity and were selective vs. other PDE isoenzymes.

IT 460345-40-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
 preparation); THU (Therapeutic use); BIOL (Biological study); PREP
 (Preparation); RACT (Reactant or reagent); USES (Uses)
 (spiroquinazolinones as PDE7 inhibitors)

RN 460345-40-8 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 6'-methoxy- (CA
 INDEX NAME)



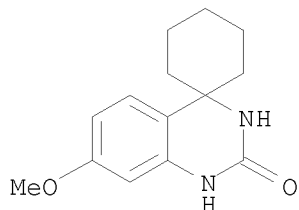
IT 460345-42-0P 460345-65-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(spiroquinazolinones as PDE7 inhibitors)

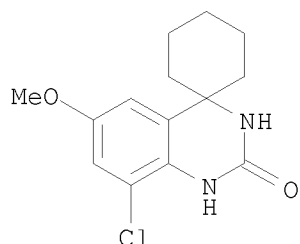
RN 460345-42-0 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 7'-methoxy- (CA
 INDEX NAME)



RN 460345-65-7 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-6'-methoxy-
 (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:246965 CAPLUS

DOCUMENT NUMBER: 140:270874

TITLE: Preparation of spirocondensed quinazolinones as phosphodiesterase inhibitors

INVENTOR(S): Bernardelli, Patrick; Vergne, Fabrice; Mendes, Chrystelle; Ducrot, Pierre

PATENT ASSIGNEE(S): Warner-Lambert Company LLC, USA

SOURCE: Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

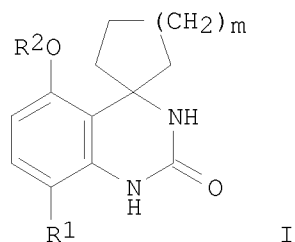
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1400244	A1	20040324	EP 2002-292275	20020917
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CA 2499330	A1	20040401	CA 2003-2499330	20030908
WO 2004026818	A1	20040401	WO 2003-IB3965	20030908
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003259496	A1	20040408	AU 2003-259496	20030908
EP 1542694	A1	20050622	EP 2003-797455	20030908
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003014379	A	20050719	BR 2003-14379	20030908
CN 1681507	A	20051012	CN 2003-822128	20030908
JP 2006501277	T	20060112	JP 2004-537412	20030908
TW 251590	B	20060321	TW 2003-92125477	20030916
US 20040106631	A1	20040603	US 2003-667111	20030917
MX 2005PA02913	A	20050527	MX 2005-PA2913	20050316
NO 2005001695	A	20050405	NO 2005-1695	20050405
PRIORITY APPLN. INFO.:			EP 2002-292275	A 20020917

US 2002-429507P
WO 2003-IB3965

P 20021126
W 20030908

OTHER SOURCE(S): MARPAT 140:270874
GI



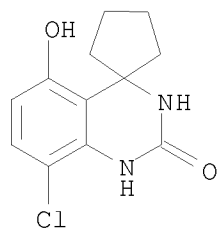
AB Title compds. I [$m = 1, 2, 3$; $R_1 = \text{Me, Cl, Br, F}$; $R_2 = (\text{un})\text{substituted alkyl, heterocyclic}$] were prepd. for use as inhibitors of PDE-7 (no data). Thus, I [$R_1 = \text{Cl}$, $R_2 = \text{OCH}_2\text{CH}_2\text{NHCH}_2\text{CO}_2\text{Me}$] was treated with aqueous NH_3 to give I [$R_1 = \text{Cl}$, $R_2 = \text{OCH}_2\text{CH}_2\text{NHCH}_2\text{CONH}_2$].

IT 674336-39-1 674336-44-8 674336-59-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of spirocondensed quinazolinones as phosphodiesterase inhibitors)

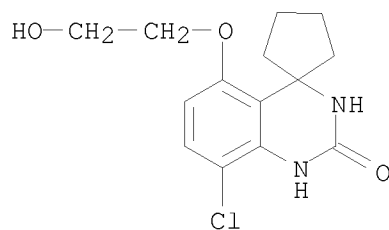
RN 674336-39-1 CAPLUS

CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-hydroxy-
(CA INDEX NAME)



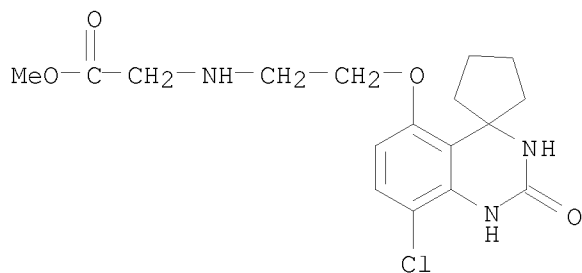
RN 674336-44-8 CAPLUS

CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-(2-hydroxyethoxy)- (CA INDEX NAME)

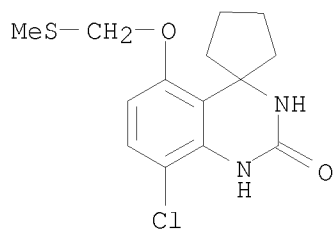


RN 674336-59-5 CAPLUS

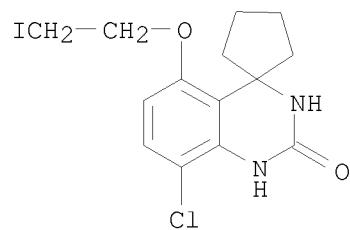
CN Glycine, N-[2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclopentane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]ethyl]-, methyl ester (9CI) (CA INDEX NAME)



IT 674336-41-5P 674336-46-0P 674336-51-7P
 674336-53-9P 674336-55-1P 674336-56-2P
 674336-57-3P 674336-58-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of spirocondensed quinazolinones as phosphodiesterase
 inhibitors)
 RN 674336-41-5 CAPLUS
 CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-
 [(methylthio)methoxy]- (CA INDEX NAME)

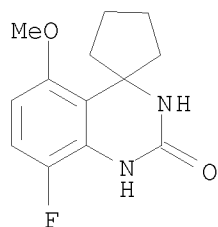


RN 674336-46-0 CAPLUS
 CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-(2-
 iodoethoxy)- (CA INDEX NAME)



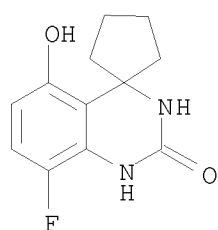
RN 674336-51-7 CAPLUS
 CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-fluoro-5'-methoxy-
 (CA INDEX NAME)

10/ 667,111



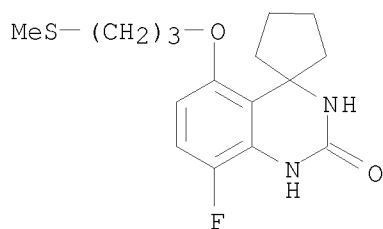
RN 674336-53-9 CAPLUS

CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-fluoro-5'-hydroxy-
(CA INDEX NAME)



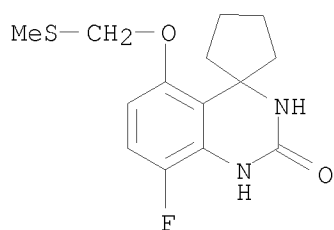
RN 674336-55-1 CAPLUS

CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-fluoro-5'-[3-(methylthio)propoxy]- (CA INDEX NAME)



RN 674336-56-2 CAPLUS

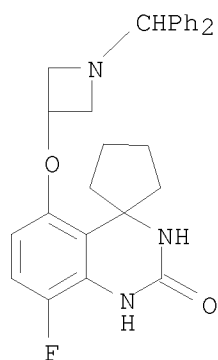
CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-fluoro-5'-
[(methylthio)methoxy]- (CA INDEX NAME)



RN 674336-57-3 CAPLUS

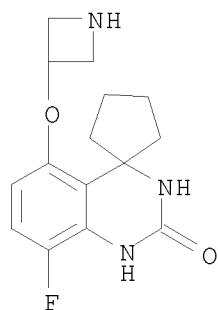
CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 5'-[[1-(diphenylmethyl)-3-azetidinyloxy]-8'-fluoro- (CA INDEX NAME)

10/ 667,111



RN 674336-58-4 CAPLUS

CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 5'-(3-azetidinyloxy)-8'-fluoro- (CA INDEX NAME)



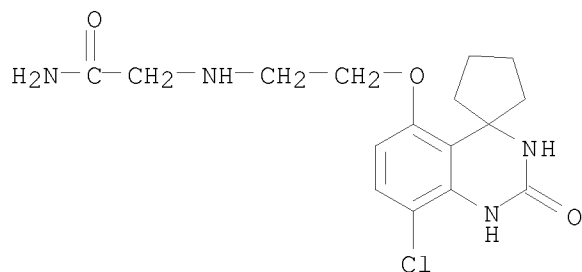
IT 674336-60-8P 674336-61-9P 674336-62-0P

674336-63-1P 674336-64-2P 674336-65-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of spirocondensed quinazolinones as phosphodiesterase inhibitors)

RN 674336-60-8 CAPLUS

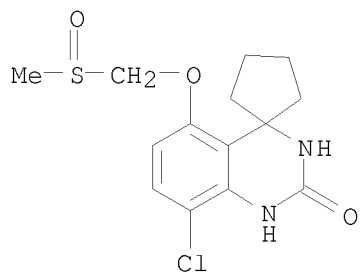
CN Acetamide, 2-[[2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclopentane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]ethyl]amino]- (9CI) (CA INDEX NAME)



RN 674336-61-9 CAPLUS

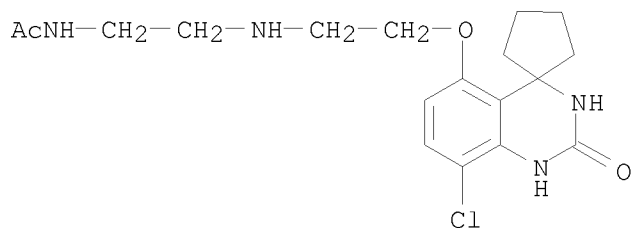
CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[(methylsulfinyl)methoxy]- (CA INDEX NAME)

10/ 667,111



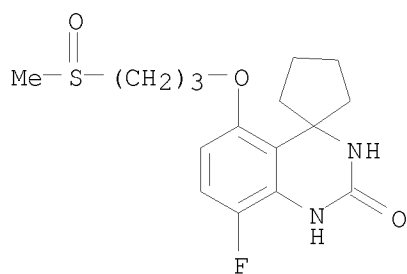
RN 674336-62-0 CAPLUS

CN Acetamide, N-[2-[[2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclopentane-1,4'(1'H)-quinazolin]-5'-yl)oxy]ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)



RN 674336-63-1 CAPLUS

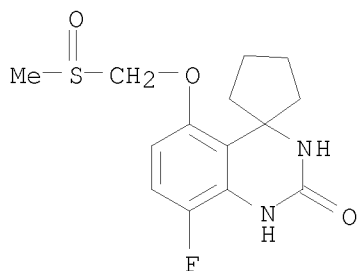
CN Spiro[cyclopentane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-fluoro-5'-[3-(methylsulfinyl)propoxy]- (CA INDEX NAME)



RN 674336-64-2 CAPLUS

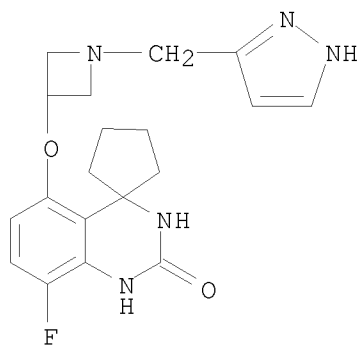
CN Spiro[cyclopentane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-fluoro-5'-[(methylsulfinyl)methoxy]- (CA INDEX NAME)

10/ 667,111



RN 674336-65-3 CAPLUS

CN Spiro[cyclopentane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-fluoro-5'-[[1-(1H-pyrazol-3-ylmethyl)-3-azetidinyloxy]- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:754361 CAPLUS

DOCUMENT NUMBER: 137:247713

TITLE: Preparation of spirotricyclic quinoline derivatives and analogs and their use as phosphodiesterase-7 inhibitors

INVENTOR(S): Bernardelli, Patrick; Ducrot, Pierre; Lorthiois, Edwige; Vergne, Fabrice

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: PCT Int. Appl., 116 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

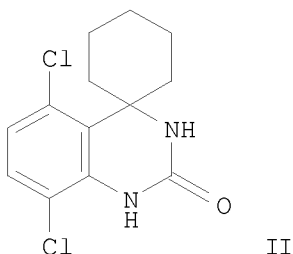
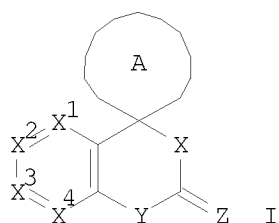
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076953	A1	20021003	WO 2001-EP3355	20010321
W: US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
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W: GM, GH, KE, LS, MW, MZ, SL, SD, SZ, TZ, UG, ZW				
TW 267509	B	20061201	TW 2002-91104028	20020305

CA 2441313	A1	20020926	CA 2002-2441313	20020318
WO 2002074754	A1	20020926	WO 2002-EP3594	20020318
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2002304800	B2	20070830		
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EP 1373224	B1	20070718		
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HU 2003003637	A2	20040301	HU 2003-3637	20020318
HU 2003003637	A3	20040728		
BR 2002008192	A	20040302	BR 2002-8192	20020318
CN 1498212	A	20040519	CN 2002-806971	20020318
JP 2004529123	T	20040924	JP 2002-573763	20020318
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EP 1801106	A2	20070627	EP 2007-104642	20020318
EP 1801106	A3	20070704		
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ES 2288552	T3	20080116	ES 2002-732544	20020318
US 20020198198	A1	20021226	US 2002-101996	20020319
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IN 2003DN01358	A	20070112	IN 2003-DN1358	20030826
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NO 2003004187	A	20031015	NO 2003-4187	20030919
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US 20040214843	A1	20041028	US 2004-852404	20040524
US 7214676	B2	20070508		
US 20070049558	A1	20070301	US 2006-551687	20061020
AU 2007240176	A1	20080103	AU 2007-240176	20071207
PRIORITY APPLN. INFO.:				
			WO 2001-EP3355	A 20010321
			AU 2002-304800	A3 20020318
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			WO 2002-EP3594	W 20020318
			US 2002-101996	B1 20020319
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OTHER SOURCE(S):				
GI				
MARPAT 137:247713				

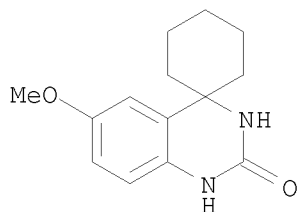


AB Title compds. I [X1-4 = N provided that not more than two of X1-4 simultaneously represent N; C-R1; R1 = Q1, alk(en/yn)yl, Q1 = H, halo, CN, NO2, SO3H, etc.; when X1-2 both represent C-R1, the 2 substituents R1 may form together with the carbon atoms to which they are attached, a 5-membered heterocyclic ring; X is O, NR9; R9 = H, CN, OH, NH2, alk(en/yn)yl; Y = O, S, NR12; R12 = H, CN, OH, NH2, alk(en/yn)yl; Z = CH-NO2, O, S, NR13; R13 = H, CN, OH, NH2, aryl, heteroaryl, cycloalkyl, etc.; A = cyclohexyl, heterocyclyl, etc. and tautomeric analogs] were prepared For instance, II was prepared from 2,5-dichlorophenylurea, cyclohexanone and polyphosphoric acid in 7% yield. II had IC50 = 0.014 μ M for the PDE7 receptor. I are useful for the treatment of autoimmune diseases, osteoarthritis, etc.

IT 460345-40-8P, 6'-Methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460345-42-0P, 7'-Methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460345-44-2P, 8'-Methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460345-65-7P, 8'-Chloro-6'-methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (PDE7 inhibitor; preparation of spirotricyclic quinoline derivs. and analogs and use as phosphodiesterase-7 inhibitors)

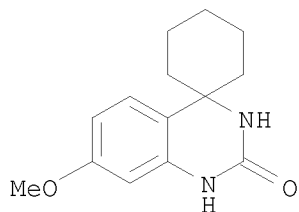
RN 460345-40-8 CAPLUS

CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 6'-methoxy- (CA INDEX NAME)



RN 460345-42-0 CAPLUS

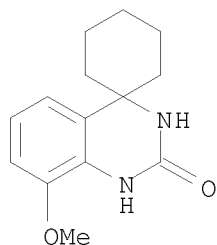
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RN 460345-44-2 CAPLUS

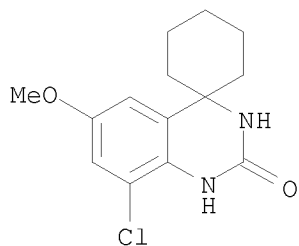
CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-methoxy- (CA INDEX NAME)

10/ 667,111



RN 460345-65-7 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-6'-methoxy-
(CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:736240 CAPLUS

DOCUMENT NUMBER: 137:247712

TITLE: Preparation of spirotricyclic quinoline derivatives
and analogs and their use as phosphodiesterase-7
inhibitors

INVENTOR(S): Bernardelli, Patrick; Ducrot, Pierre; Lorthiois,
Edwige; Vergne, Fabrice

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE: PCT Int. Appl., 187 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002074754	A1	20020926	WO 2002-EP3594	20020318
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2002076953	A1	20021003	WO 2001-EP3355	20010321

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 PT, SE, TR

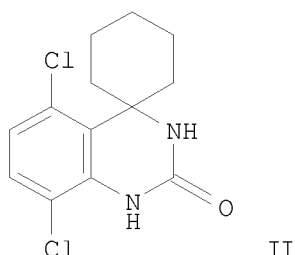
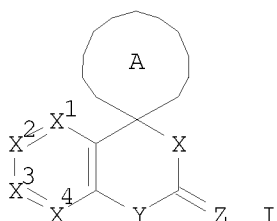
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AU 2002304800	A1	20021003	AU 2002-304800	20020318
AU 2002304800	B2	20070830		
EP 1373224	A1	20040102	EP 2002-732544	20020318
EP 1373224	B1	20070718		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

EE 200300459	A	20040216	EE 2003-459	20020318
HU 2003003637	A2	20040301	HU 2003-3637	20020318
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JP 2004529123	T	20040924	JP 2002-573763	20020318
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IN 2003DN01358	A	20070112	IN 2003-DN1358	20030826
BG 108181	A	20040930	BG 2003-108181	20030917
NO 2003004187	A	20031015	NO 2003-4187	20030919
MX 2003PA08485	A	20031208	MX 2003-PA8485	20030919
AU 2007240176	A1	20080103	AU 2007-240176	20071207

PRIORITY APPLN. INFO.:
 WO 2001-EP3355 W 20010321
 AU 2002-304800 A3 20020318
 WO 2002-EP3594 W 20020318

OTHER SOURCE(S): MARPAT 137:247712
 GI



- AB Title compds. I [X1-4 = N provided that not more than two of X1-4 simultaneously represent N; C-R1; R1 = Q1, alk(en/yn)yl, Q1 = H, halo, CN, NO2, SO3H, etc.; when X1-2 both represent C-R1, the 2 substituents R1 may form together with the carbon atoms to which they are attached, a 5-membered heterocyclic ring; X is O, NR9; R9 = H, CN, OH, NH2, alk(en/yn)yl; Y = O, S, NR12; R12 = H, CN, OH, NH2, alk(en/yn)yl; Z = CH-NO2, O, S, NR13; R13 = H, CN, OH, NH2, aryl, heteroaryl, cycloalkyl, etc.; A = cyclohexyl, heterocyclyl, etc. and tautomeric analogs] were prepared For instance, II was prepared from 2,5-dichlorophenylurea, cyclohexanone and polyphosphoric acid in 7% yield. II had IC50 = 0.014 μ M for the PDE7 receptor. I are useful for the treatment of autoimmune diseases, osteoarthritis, etc.
- IT 460346-10-5P, 8'-Chloro-5'-hydroxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-11-6P, 8'-Chloro-5'-hydroxy-6'-iodospiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-12-7P, 8'-Chloro-6'-iodo-5'-methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-28-5P, 8'-Chloro-5'-(2-hydroxyethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-31-0P, 8'-Chloro-5'-cyanomethoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-37-6P, 6'-(4-Carboxyphenyl)-8'-chloro-5'-

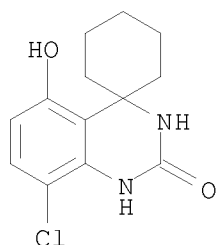
10/ 667,111

methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-60-5P
, 8'-Chloro-5'-[2-((ethoxycarbonyl)methyl)amino)ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(PDE7 inhibitor; preparation of spirotricyclic quinoline derivs. and analogs and use as phosphodiesterase-7 inhibitors)

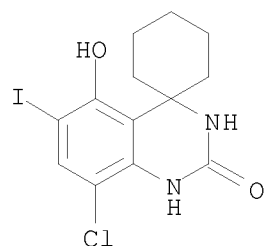
RN 460346-10-5 CAPLUS

CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-hydroxy-
(CA INDEX NAME)



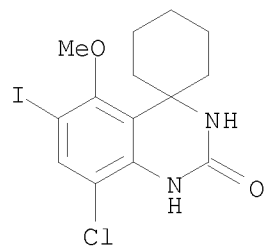
RN 460346-11-6 CAPLUS

CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-hydroxy-
6'-iodo- (CA INDEX NAME)



RN 460346-12-7 CAPLUS

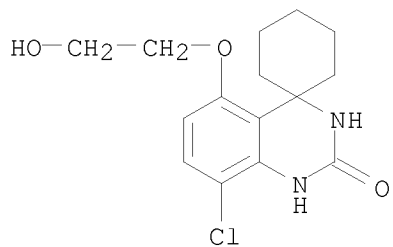
CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-6'-iodo-5'-
methoxy- (CA INDEX NAME)



RN 460346-28-5 CAPLUS

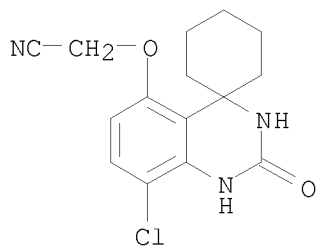
CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-(2-
hydroxyethoxy)- (CA INDEX NAME)

10/ 667,111



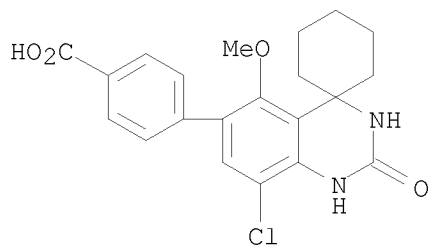
RN 460346-31-0 CAPLUS

CN Acetonitrile, [(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]- (9CI) (CA INDEX NAME)



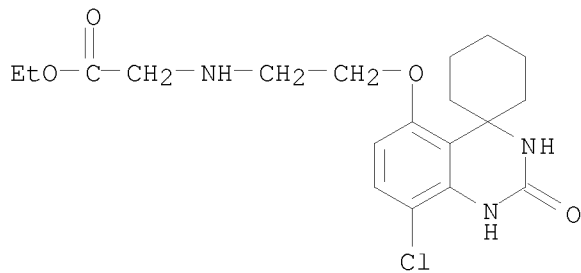
RN 460346-37-6 CAPLUS

CN Benzoic acid, 4-(8'-chloro-2',3'-dihydro-5'-methoxy-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-6'-yl)- (9CI) (CA INDEX NAME)



RN 460346-60-5 CAPLUS

CN Glycine, N-[2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



IT 460345-40-8P, 6'-Methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460345-42-0P, 7'-Methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460345-44-2P, 8'-Methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460345-65-7P, 8'-Chloro-6'-methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-02-5P, 8'-Chloro-5'-methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-13-8P, 8'-Chloro-6'-cyano-5'-methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-14-9P, 8'-Chloro-5'-[2-(4-morpholino)ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-15-0P, 8'-Chloro-5'-(2-dimethylaminoethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-16-1P, 8'-Chloro-5'-(2-aminoethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-18-3P, 8'-Chloro-5'-[2-(methylamino)ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-19-4P, 8'-Chloro-5'-[2-(2-aminoethoxy)ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-21-8P, 8'-Chloro-5'-(3-(dimethylamino)propoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-22-9P, 8'-Chloro-5'-ethoxycarbonylmethoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-23-0P, 5'-Carboxymethoxy-8'-chlorospiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-24-1P, 5'-(3-(Carboxy)propoxy)-8'-chlorospiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-26-3P, 8'-Chloro-5'-(3-sulfopropoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-27-4P 460346-29-6P, 8'-Chloro-5'-(5-ethoxycarbonylfuran-2-ylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-30-9P, 8'-Chloro-5'-(5-carboxyfuran-2-ylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-32-1P, 8'-Chloro-5'-(1H-tetrazol-5-ylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-33-2P, 8'-Chloro-5'-(5-hydroxy-[1,2,4]oxadiazol-3-ylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-36-5P, 8'-Chloro-6'-iodo-5'-(2-(dimethylamino)ethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-38-7P, 6'-(3-Carboxyphenyl)-8'-chloro-5'-methoxyspiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-48-9P, 8'-Chloro-5'-methoxy-6'-[4-[[4-methylpiperazine]carbonyl]phenyl]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-57-0P, 8'-Chloro-5'-(3-dimethylamino-2-hydroxypropoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-59-2P, 8'-Chloro-5'-(3-methylamino-2-hydroxypropoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-61-6P, 8'-Chloro-5'-[2-(((carboxy)methyl)amino)ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one hydrochloride 460346-63-8P, 8'-Chloro-5'-(2-((methanesulfonyl)amino)-2-oxoethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-64-9P, 8'-Chloro-5'-[2-[(5-methylisoxazol-3-ylmethyl)amino]ethoxy]spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one

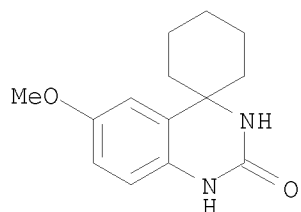
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(PDE7 inhibitor; preparation of spirotricyclic quinoline derivs. and analogs and use as phosphodiesterase-7 inhibitors)

RN 460345-40-8 CAPLUS

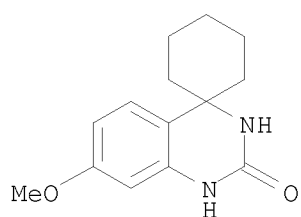
CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 6'-methoxy- (CA INDEX NAME)

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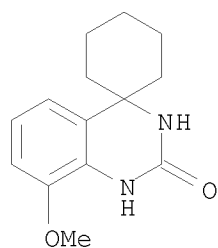
RN 460345-42-0 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 7'-methoxy- (CA INDEX NAME)



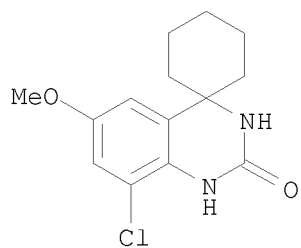
RN 460345-44-2 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-methoxy- (CA INDEX NAME)



RN 460345-65-7 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-6'-methoxy- (CA INDEX NAME)

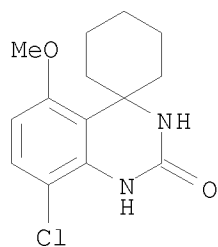


RN 460346-02-5 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-methoxy-

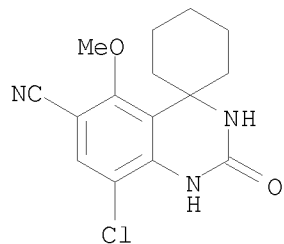
10/ 667,111

(CA INDEX NAME)



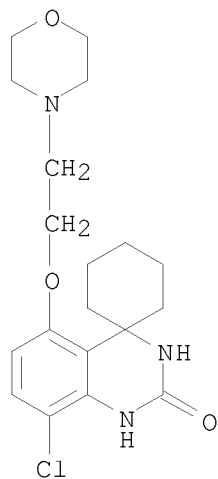
RN 460346-13-8 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazoline]-6'-carbonitrile,
8'-chloro-2',3'-dihydro-5'-methoxy-2'-oxo- (CA INDEX NAME)



RN 460346-14-9 CAPLUS

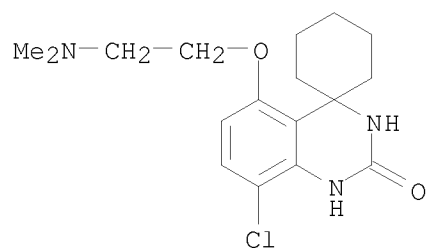
CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[2-(4-morpholinyl)ethoxy]- (CA INDEX NAME)



RN 460346-15-0 CAPLUS

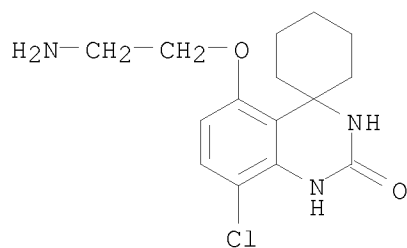
CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[2-(dimethylamino)ethoxy]- (CA INDEX NAME)

10/ 667,111



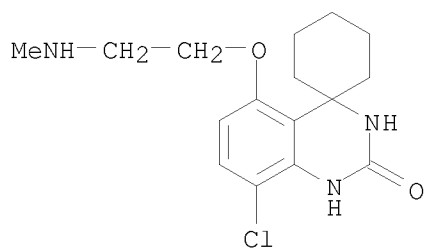
RN 460346-16-1 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 5'-(2-aminoethoxy)-8'-chloro- (CA INDEX NAME)



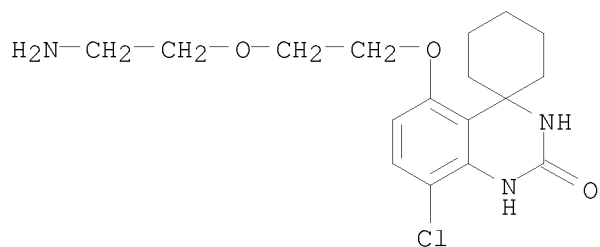
RN 460346-18-3 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[2-(methylamino)ethoxy]- (CA INDEX NAME)



RN 460346-19-4 CAPLUS

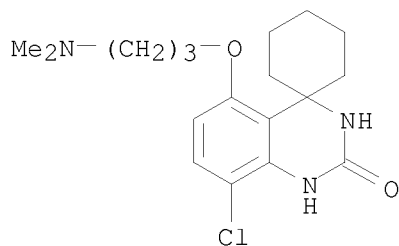
CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 5'-[2-(2-aminoethoxy)ethoxy]-8'-chloro- (CA INDEX NAME)



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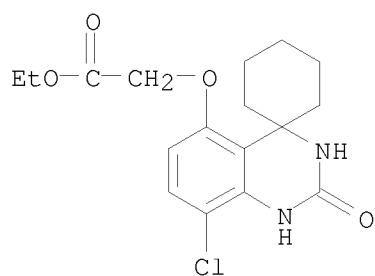
RN 460346-21-8 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[3-(dimethylamino)propoxy]- (CA INDEX NAME)



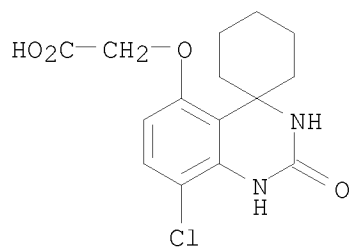
RN 460346-22-9 CAPLUS

CN Acetic acid, [(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 460346-23-0 CAPLUS

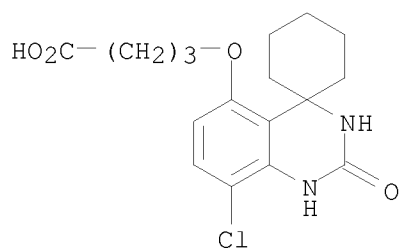
CN Acetic acid, [(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]- (9CI) (CA INDEX NAME)



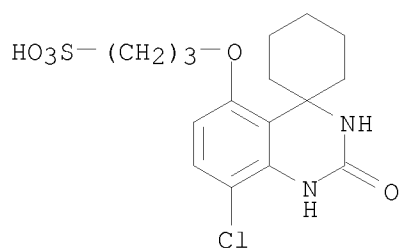
RN 460346-24-1 CAPLUS

CN Butanoic acid, 4-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]- (9CI) (CA INDEX NAME)

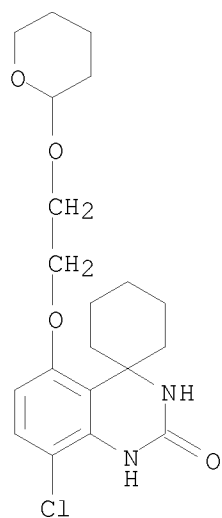
10/ 667,111



RN 460346-26-3 CAPLUS
CN 1-Propanesulfonic acid, 3-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]- (9CI) (CA INDEX NAME)

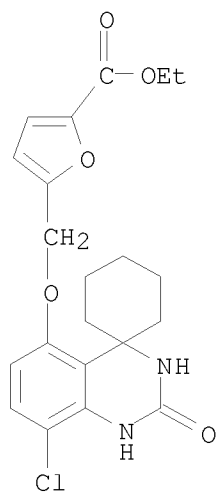


RN 460346-27-4 CAPLUS
CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[2-[(tetrahydro-2H-pyran-2-yl)oxy]ethoxy]- (CA INDEX NAME)



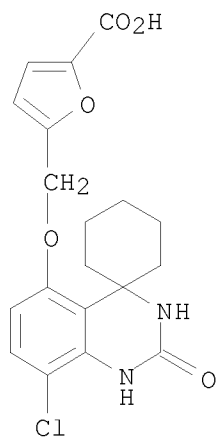
RN 460346-29-6 CAPLUS
CN 2-Furancarboxylic acid, 5-[[[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

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RN 460346-30-9 CAPLUS

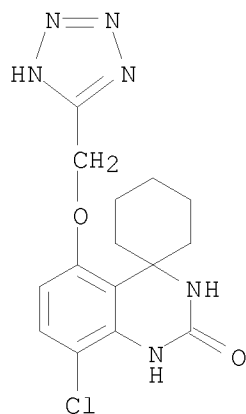
CN 2-Furancarboxylic acid, 5-[[[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]methyl]- (9CI) (CA INDEX NAME)



RN 460346-32-1 CAPLUS

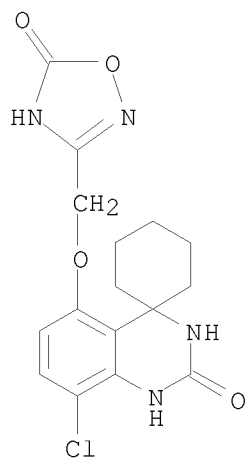
CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-(1H-tetrazol-5-ylmethoxy)- (9CI) (CA INDEX NAME)

10/ 667,111



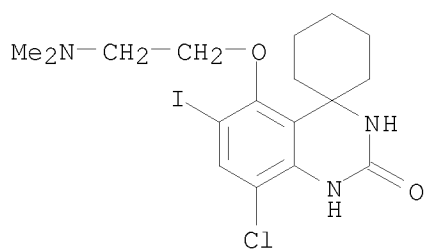
RN 460346-33-2 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[(2,5-dihydro-5-oxo-1,2,4-oxadiazol-3-yl)methoxy]- (CA INDEX NAME)



RN 460346-36-5 CAPLUS

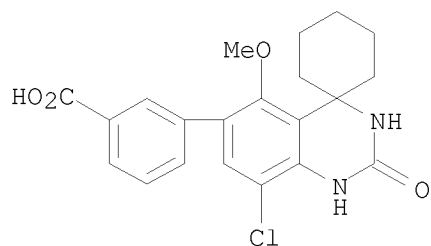
CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-[2-(dimethylamino)ethoxy]-6'-iodo- (CA INDEX NAME)



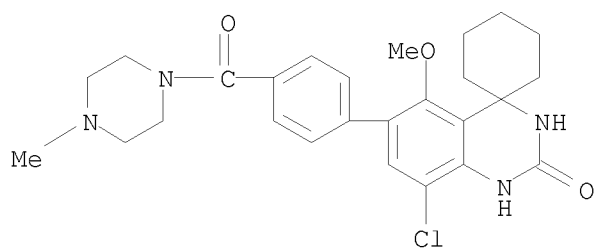
RN 460346-38-7 CAPLUS

CN Benzoic acid, 3-(8'-chloro-2',3'-dihydro-5'-methoxy-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-6'-yl)- (9CI) (CA INDEX NAME)

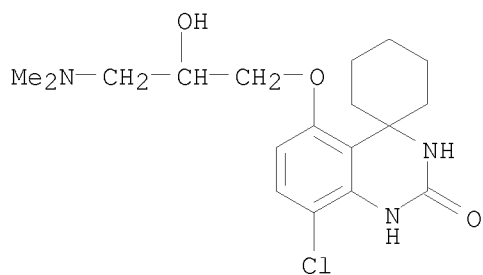
10/ 667,111



RN 460346-48-9 CAPLUS
 CN Piperazine, 1-[4-(8'-chloro-2',3'-dihydro-5'-methoxy-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-6'-yl)benzoyl]-4-methyl- (9CI)
 (CA INDEX NAME)

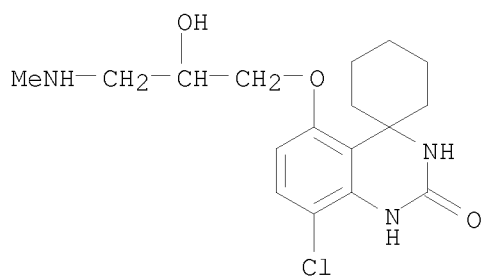


RN 460346-57-0 CAPLUS
 CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-[3-(dimethylamino)-2-hydroxypropoxy]- (CA INDEX NAME)



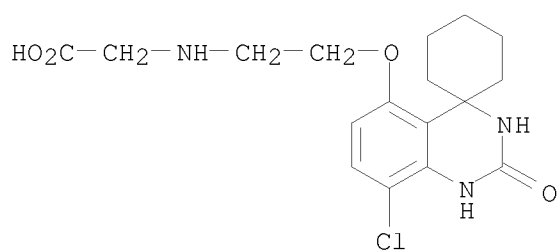
RN 460346-59-2 CAPLUS
 CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-[2-hydroxy-3-(methylamino)propoxy]- (CA INDEX NAME)

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RN 460346-61-6 CAPLUS

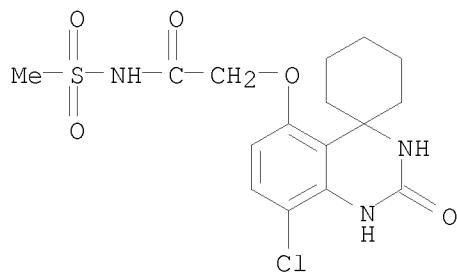
CN Glycine, N-[2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

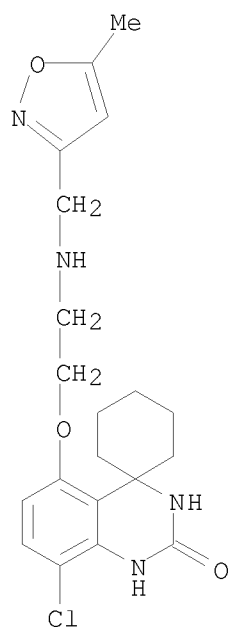
RN 460346-63-8 CAPLUS

CN Acetamide, 2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'(1'H)-quinazolin]-5'-yl)oxy]-N-(methylsulfonyl)- (9CI) (CA INDEX NAME)

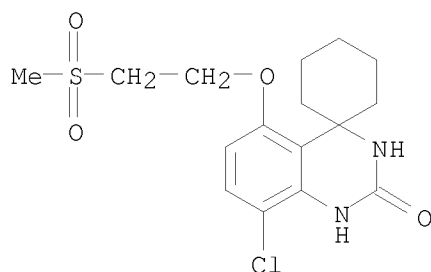


RN 460346-64-9 CAPLUS

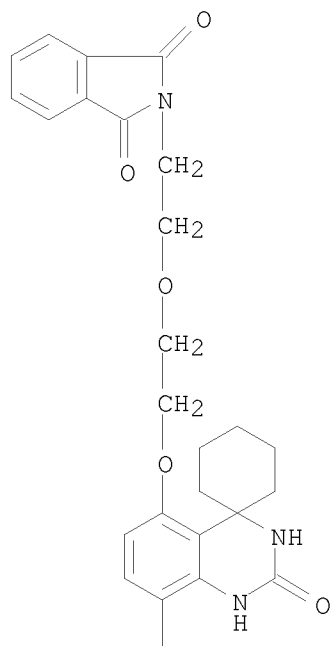
CN Spiro[cyclohexane-1,4'(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-[2-[[5-methyl-3-isoxazolyl)methyl]amino]ethoxy]- (CA INDEX NAME)



- IT 460346-17-2P, 8'-Chloro-5'-(2-(methanesulfonyl)ethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one 460346-20-7P
 460346-25-2P 460346-34-3P, 8'-Chloro-5'-(N-hydroxycarbamimidoylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one
 460346-58-1P, 8'-Chloro-5'-(oxiran-2-ylmethoxy)spiro[cyclohexane-1,4'-quinazolin]-2'(1'H)-one
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; preparation of spirotricyclic quinoline derivs. and analogs and use as phosphodiesterase-7 inhibitors)
- RN 460346-17-2 CAPLUS
- CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'(3'H)-one, 8'-chloro-5'-[2-(methylsulfonyl)ethoxy]- (CA INDEX NAME)

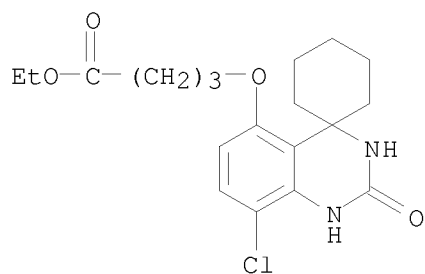


- RN 460346-20-7 CAPLUS
- CN 1H-Isoindole-1,3(2H)-dione, 2-[2-[2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]ethoxy]ethyl]- (9CI)
 (CA INDEX NAME)



RN 460346-25-2 CAPLUS

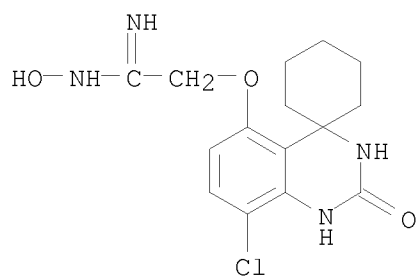
CN Butanoic acid, 4-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 460346-34-3 CAPLUS

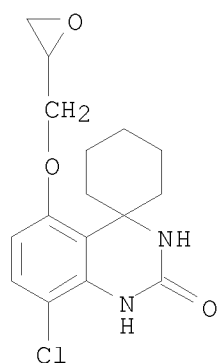
CN Ethanimidamide, 2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]-N-hydroxy- (9CI) (CA INDEX NAME)

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RN 460346-58-1 CAPLUS

CN Spiro[cyclohexane-1,4'-(1'H)-quinazolin]-2'-(3'H)-one, 8'-chloro-5'-(oxiranylmethoxy)- (9CI) (CA INDEX NAME)



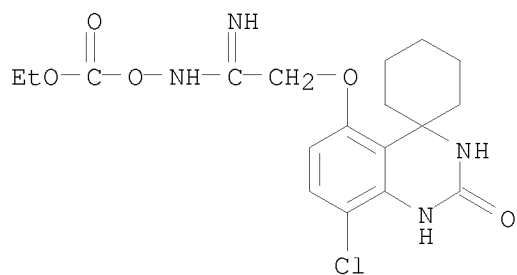
IT 460346-35-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(reactant; preparation of spirotricyclic quinoline derivs. and analogs and use as phosphodiesterase-7 inhibitors)

RN 460346-35-4 CAPLUS

CN Ethanimidamide, 2-[(8'-chloro-2',3'-dihydro-2'-oxospiro[cyclohexane-1,4'-(1'H)-quinazolin]-5'-yl)oxy]-N-[(ethoxycarbonyl)oxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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10/ 667,111

(FILE 'HOME' ENTERED AT 10:41:38 ON 23 APR 2008)

FILE 'REGISTRY' ENTERED AT 10:42:15 ON 23 APR 2008

L1 STRUCTURE UPLOADED

L2 5 S L1

L3 87 S L1 FUL

FILE 'CAPLUS' ENTERED AT 10:42:56 ON 23 APR 2008

L4 8 S L3

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

44.08

222.65

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-6.40

-6.40

STN INTERNATIONAL LOGOFF AT 10:43:35 ON 23 APR 2008